

A World in Motion (AWIM)

2015-2016 Scale-Up Program

Overview: AWIM provides science, technology, engineering and math education through inquiry based real world engineering challenges designed for primary, elementary and middle school students.

Grade Levels: K-8

Program Summary

SAE International's A World In Motion® (AWIM) program is an educator-administered program that brings STEM education to life in the classroom. The AWIM program provides age-appropriate multidisciplinary hands-on experiences for students. Each AWIM activity is benchmarked to national standards, and combines a comprehensive curriculum built around the AWIM Engineering Design Experience. This problem solving process allows students to work within a structure to solve a “challenge” to design, build, and test a prototype, then defend their design through a presentation.

Project Description/Objectives

- Engage students in STEM subjects and careers to increase student performance and interest in these areas;
- Provide Iowa educators with a program that provides the opportunity to introduce students to STEM professionals as classroom volunteers for real world exposure to STEM careers;
- Increase students understanding and mastery of standards based concepts and skills including: team work and collaboration, experimentation, organizing/presenting data through tables and presentations as measured on an educator pre- and post-participation survey;
- Improve educator effectiveness through professional development, which will enhance their understanding of the subject matter and delivery of the curriculum, increase their confidence for teaching in general and their comfort with physical science concepts in particular;
- And, deliver a value driven program with proven, effective, and measurable results indicating students' improved performance in STEM subjects.

What does the project provide?

- Applicants receive one day of professional development—PD will take place in each STEM Region at central locations. Applicants will receive PD customized to primary (K-3), elementary (4-6) or middle school levels (6-8).
- AWIM curriculum and classroom materials—Applicants will receive AWIM kit-based learning material (each kit serves 24+/- students). AWIM kits include the full curriculum and materials required for program delivery.
- Reimbursement of \$120 per applicant attending training.
- Ongoing implementation support and resources.

What is required by the applicant in order to implement this program?

As a selected Service Provider, SAE International is not only providing curriculum/material kits on a cost basis to educators choosing the AWIM program, but also a number of “in-kind products and services” to support the success of the Scale-Up Program, which included the following:

- Administrative support to applicants (in-kind);
- SAE/Iowa STEM Scale-Up customized website to interface with applicants (in-kind);
- SAE Staff travel funds (in-kind);
- And, an additional 25% in curriculum and classroom materials for applicants that partnered with a “STEM Volunteer” to enrich the AWIM experience for participating educators/students (in-kind).

The following are the only requirements for the applicant:

- Attendance/Participation of implementing educators in Professional Development;
- Timely completion of AWIM experience in the classroom;
- Outcome reporting (as deemed appropriate by Regional STEM Manager);
- Agreement to use/implement material received through Scale-Up award.

Website to View Program and Standards Alignment: http://www.awim.org/pdf/standards_document.pdf

Program Video: <http://www.awim.org/videos/video-player-awim.htm>